

Application No. 09/584,604
Amendment dated August 13, 2003
Reply to Office Action of July 2, 2003

REMARKS

Independent claims 1, 11 and 21 stand rejected under 35 U.S.C. § 103(a) over Patrick et al. (U.S. Patent No. 5,706,483, hereinafter, "Patrick") and further in view of Margulis (U.S. Patent Application Publication No. US 2003/01013056 A1, hereinafter "Margulis"). Specifically, independent claim 1 calls for a method including performing a first pixel transformation at a first virtual memory location to which pixel data is written to in a virtual memory space, using a one-way re-mapping to write the transformed pixel data from the first virtual memory location to a virtual memory address generated for a second memory location, and transferring the pixel data to a memory controller using a memory controller client, in a forward, write-through direction.

In contrast, the Patrick reference fails to teach or suggest use of a one-way re-mapping to write the transformed pixel data from the first virtual memory location to the virtual memory address of the second memory location and performing a first pixel transformation at the first virtual memory location in a virtual memory space. In this manner, the pixel data may be transferred to a memory controller using a memory controller client in a forward, write-through direction. In other words, mapping of the transfer functions including one that performs the first pixel transformation at the first virtual memory location in the virtual memory space is absent from the Patrick reference because without a means to operate on the pixel data in virtual memory space, the Patrick reference fails to obviate the need to go back and forth to the memory from which a source bit map is obtained for transfer to a destination bitmap between the first and second memory locations which are not taught or suggested to be virtual in nature.

Accordingly, the Patrick reference, considered either alone or in combination with the cited reference, i.e., Margulis, fails to provide mapping of the transfer functions onto a virtual memory space such that one or more transfer functions may be applied on the pixel data in parallel instead of serially. See column 5, lines 33-35 and column 6, lines 29-30. In this manner,

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the Patrick reference fails to teach or suggest generating a virtual memory address for a second memory location. Therefore, transformation of pixel data from first virtual memory location to second virtual memory location using a one-way re-mapping to write the transformed pixel data from the first virtual memory location to the virtual memory address of the second memory location with a virtual memory address and transfer of the pixel data to a memory controller using a memory controller client in a forward, write-through direction is not even remotely taught or suggested by the Patrick reference, much less in the purported manner.

Margulis merely teaches use of a mapping policy for locating one or more row buffers corresponding to the memory locations into one or more potential memory array rows. However, in paragraph 0061, the language in the Margulis reference indicates that the set and fully associated mapping schemes where a row buffer replacement algorithm must be implemented is used as teaching using a one-way remapping and performing a first pixel transformation in a virtual memory space, as claimed in claim 1. Therefore, even if this teaching of Margulis is incorporated into the Patrick reference, the claimed invention cannot result, as explained above.

For at least the same reasons as applied to claim 1, independent claims 11 and 21 are in condition of allowance, which is respectfully requested. Although dependent claims 3-7, 9-10, 13-17, 19-20 and 22-25 stand rejected under 35 U.S.C. 102(b) as being anticipated by the Patrick reference, the Applicant respectfully requests that at least based on the grounds of rejection for corresponding independent claims 1, 11 and 21, the patentability of these dependent claims should be considered together with the patentability of associated independent claims under 35 U.S.C. 103(a). Therefore, the Applicant respectfully submits that either an improper rationale is used to combine the cited references (i.e., the Patrick and Margulis references) for the rejections of independent claims 1, 11 and 21 or there is no suggestion or motivation whatsoever present

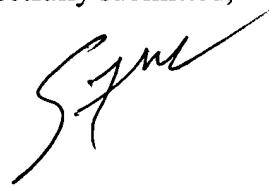
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either in the Margulis reference and/or in the Patrick reference to make the proposed combination or modification as suggested by the Examiner.

Nonetheless, at least for the reason that these dependent claims including claims 3-7, 9-10, 13-17, 19-20 and 22-25 depend from an allowable independent claim, thus patentably distinguishing these claims over the cited references. However, to the extent that characterizations of the cited references or Applicant's claim subject matter are not specifically or adequately addressed at least in view of the reasons provided above, it is to be understood that the Applicant does not acquiesce to such characterizations pertaining to the rejected claims. The Examiner is respectfully requested to reconsider all the pending claims.

In view of these remarks, the application is now in condition for allowance and the Examiner's prompt action in accordance therewith is respectfully requested.

Respectfully submitted,



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Sanjeev K. Singh under 37 C.F.R. § 10.9(b)
Registration No. 28,994
TROP, PRUNER & HU, P.C.
8554 Katy Freeway, Suite 100
Houston, Texas 77024
(713) 468-8880 [Phone]
(713) 468-8883 [Fax]

Customer No.: 21906



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